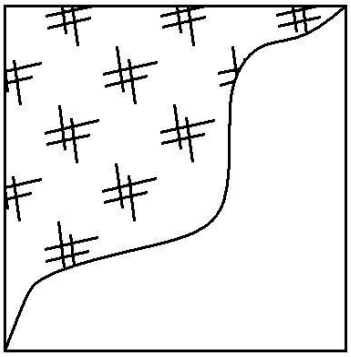
EC-10 WOOD MULCHING

Refer to: ITD Standards and Specifications for Highway Construction, Sections 212, 621, and 711.
QPL Category: 621 Mulching



Standard Symbol

Definition and Purpose

- Wood mulching consists of applying a mixture of chipped or cut wood mulch, bark, or compost. Wood mulch is mostly applicable to landscape projects.
- The primary function of wood mulching is to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff.

BMP Objectives

- ☐ Perimeter Control
- ☒ Slope Protection
- ☒ Borrow and Stockpiles
- ☒ Drainage Areas
- ☐ Sediment Trapping
- ☐ Stream Protection
- ☒ Temporary Stabilizing
- ☒ Permanent Stabilizing

Appropriate Applications

Wood mulching is considered a temporary soil stabilization (erosion control) alternative in the following situations:

- As a stand-alone temporary surface cover on disturbed areas until soils can be prepared for revegetation and permanent vegetative cover can be established.
- As short-term, non-vegetative ground cover on slopes to reduce rainfall impact, decrease the velocity of sheet flow, settle out sediment, and reduce wind erosion.

Limitations

- Wood mulch may introduce unwanted species. Green material has the potential for the presence of unwanted weeds and other plant materials.
- Chipped or cut wood does not withstand concentrated flows and is prone to sheet erosion.
- Delivery system is primarily by manual labor, although pneumatic application equipment is available.

- Wood mulch should not be applied in winds that cause unwanted or excessive spreading of the mulch.

Design Parameters

There are many types of mulches, and selection of the appropriate type shall be based on the type of application and site conditions. Mulch use on construction projects may not be compatible with planned or future projects; therefore, the project team shall coordinate with state and local agencies.

Qualified Products List Criteria

See QPL Criteria 621.

Application Procedures

Prior to application, after existing vegetation has been removed, roughen embankment and fill areas by rolling with a punching type roller or by track walking. The construction-application procedures for mulches vary significantly depending upon the type of mulching method specified. Two methods are highlighted here:

- Green material is produced by recycling vegetation trimmings such as chipped or cut shrubs and trees. Methods of application are generally by hand, although pneumatic methods are available. Materials composted must be indigenous. Noxious weeds shall not be composted.
    - It can be used as a temporary ground cover with or without seeding.
    - The green material shall be evenly distributed on-site to a depth of not more than 2 in.
- Chipped or cut wood is suitable for ground cover in ornamental or revegetated plantings.
    - Is conditionally suitable; see note under Limitations section above.
    - Shall be distributed by hand or another method approved by the Engineer.
    - Shall be evenly distributed across the soil surface to a depth of 3 inches.
- Mulch placement onto the traveled way, sidewalks, lined drainage channels, sound walls, and existing vegetation shall be avoided.
- All material must be removed prior to re-starting work on the slopes. In some cases, wood mulch may be incorporated into the soil if approved by the Engineer.
- Mulch material should come from indigenous plants only.

Maintenance and Inspection

- Inspections shall be conducted as required by the NPDES permit or contract specifications.
- Regardless of the mulching technique selected, the key consideration in Maintenance and Inspection is that the mulch needs to last long enough to achieve erosion-control objectives. If the mulch is applied as a stand-alone erosion control method over disturbed

areas (without seed), it shall last the length of time the site will remain barren or until final re-grading and revegetation.

- Where vegetation is not the ultimate cover, such as ornamental and landscape applications of bark or wood chips, maintenance shall focus on longevity and integrity of the mulch.